Claims:

1. Compounds being esters of 5-aminolevulinic acids or pharmaceutically acceptable salts thereof for use in photochemotherapy or diagnosis.

2. Compounds of formula I,

$$R^2_2N\text{-}CH_2COCH_2\text{-}CH_2CO\text{-}OR^1 \qquad (I)$$

(wherein R^1 may represent alkyl optionally substituted by hydroxy, alkoxy, acyloxy, alkoxycarbonyloxy, amino, aryl, oxo or fluoro groups and optionally interrupted by oxygen, nitrogen, sulphur or phosphorus atoms; and R^2, each of which may be the same or different, represents a hydrogen atom or a group R^1) and salts thereof for use in photochemotherapy or diagnosis.

3. Compounds as claimed in claim 2 wherein the aryl group is phenyl or a monocyclic 5-7 membered heteroaromatic.

4. Compounds as claimed in claim 2 or 3 wherein R^1 represents an unsubstituted alkyl group and/or each R^2 represents a hydrogen atom.

5. Compounds as claimed in ~~any one of claims 2 to 4~~ claims wherein the alkyl group contains up to 10 carbon atoms.

6. Compounds as claimed in ~~any one of claims 2 to 5~~ claim 2 wherein the compounds are ALA-methylester, ALA-ethylester, ALA-propyl ester, ALA-hexylester, ALA-heptylester or ALA-octylester or salts thereof.

7. A process for preparing the compounds as defined in ~~any one of claims 1 to 6~~ claims, comprising forming an ester of the carboxy group of a 5-aminolevulinic acid.

AMENDED SHEET

8. A process as claimed in claim 7, comprising reacting a 5-aminolevulinic acid, or an esterifiable derivative thereof, with an alkanol or an ester-forming derivative thereof.

9. A process as claimed in claim 7 ~~or 8,~~ which process comprises at least one of the following steps:

(a) reacting a compound of formula II

$$R^2_2N\text{-}CH_2COCH_2\text{-}CH_2CO\text{-}X \qquad (II)$$

(wherein X represents a leaving group, or COX represents an acid anhydride group and R^2 is as defined in claim 2) with a compound of formula III

$$R^1\text{-}OH \qquad (III)$$

(wherein R^1 is as defined in claim 2); and

(b) converting a compound of ~~formula~~ I into a pharmaceutically acceptable salt thereof.

10. A pharmaceutical composition comprising a compound as defined in ~~any one of claims 1 to 6~~ claim 1 or 2, or a pharmaceutically acceptable salt thereof, together with at least one pharmaceutical carrier or excipient.

11. The use of a compound as defined in ~~any one of claims 1 to 6~~ claim 1 or 2, or a pharmaceutically acceptable salt thereof, for the preparation of a therapeutic agent for use in photochemotherapy, or a diagnostic agent for use in diagnosis.

12. The use as claimed in claim 11 wherein the photochemotherapy or diagnosis is performed on disorders

or abnormalities of external or internal surfaces of the body which are responsive to photochemotherapy.

13. A method of diagnosis or photochemotherapeutic treatment of disorders or abnormalities of external or internal surfaces of the body, comprising administering to the sites of investigation or affected surfaces, a composition as defined in claim 10, and exposing said sites or surfaces to light.

14. A method as claimed in claim 13 wherein the light is in the wavelength region 500-700 nm.

15. A product comprising a compound as claimed in ~~any one of claims 1 to 6~~ claims 1 or 2 or a pharmaceutically acceptable salt thereof, together with at least one surface-penetration assisting agent, and optionally one or more chelating agents as a combined preparation for simultaneous, separate or sequential use in treating or diagnosing disorders or abnormalities of external or internal surfaces of the body which are responsive to photochemotherapy.

16. A product as claimed in claim 15 wherein the surface-penetration assisting agent is DMSO.

17. A method of <u>in vitro</u> diagnosis of abnormalities or disorders by assaying a sample of body fluid or tissue of a patient, said method comprising at least the following steps:

i) admixing said body fluid or tissue with a compound as defined in ~~any one of claims 1 to 6~~ claim 1 or 2,
ii) exposing said mixture to light,
iii) ascertaining the level of fluorescence, and
iv) comparing the level of fluorescence to control levels.

AMENDED SHEET

18. A kit for use in diagnosis or photochemotherapy of disorders or abnormalities of external or internal surfaces of the body comprising:

a) a first container containing a compound as claimed in ~~any one of claims 1 to 6~~ claims 1 or 2 or a pharmaceutically acceptable salt thereof,

b) a second container containing at least one surface penetration assisting agent; and optionally

c) one or more chelating agents contained either within said first container or in a third container.

a

add a'

add B1